

## IN THE CLAIMS:

Please amend the claims to read as follows:

1.-37. (Canceled)

38. (Currently Amended) A method for detecting within a patient infected by an HIV population the development of an antibody response capable of blocking infection comprising:

- (a) transfecting into a first sample of cells ~~cell~~
  - i) a plurality of nucleic acids, each ~~nucleic acid~~-encoding a viral envelope protein from the HIV population infecting the patient, and
  - ii) a viral expression vector which lacks a nucleic acid encoding an envelope protein, and which comprises an indicator nucleic acid which produces a detectable signal,such that the first sample of cells ~~cell~~ produces viral particles comprising envelope proteins from the HIV population ~~the envelope protein~~-encoded by said plurality of nucleic acids ~~the nucleic acid~~-obtained from the patient;
- (b) contacting the viral particles produced in step (a) with an antibody preparation from the patient;
- (c) contacting the viral particles and antibody preparation of step (b) with a second sample of cells ~~cell~~, wherein the cells of the second sample of cells ~~express cell~~ ~~expresses~~-a cell surface receptor to which ~~the~~ HIV binds;
- (d) measuring the amount of the detectable signal produced by the second sample of cells ~~cell~~ in order to determine the infectivity of the viral particles; and
- (e) comparing the amount of signal measured in step (d) with the amount of signal produced in the absence of the antibody preparation, wherein a reduced amount of signal measured in the presence of the antibody preparation indicates that the patient has developed an antibody response to the viral envelope protein capable of blocking infection.

39. (Canceled)

40. (Canceled)

41. (Currently Amended) A method for detecting within a patient infected by an HIV population the development of an antibody response capable of blocking infection comprising:
- (a) incubating a first sample of cells ~~cell~~ comprising
    - (i) a plurality of nucleic acids, each ~~nucleic acid~~ encoding a viral envelope protein from the HIV population infecting the patient, and
    - (ii) a viral expression vector which lacks a nucleic acid encoding an envelope protein, and which comprises an indicator nucleic acid which produces a detectable signal,such that the first sample of cells ~~cell~~ produces viral particles comprising ~~the envelope protein~~ envelope proteins from the HIV population encoded by ~~the nucleic acid~~ said plurality of nucleic acids obtained from the patient;
  - (b) contacting the viral particles produced in step (a) with an antibody preparation from the patient;
  - (c) contacting the viral particles and antibody preparation of step (b) with a second sample of cells ~~cell~~, wherein the cells of the second sample of cells ~~express cell~~ expresses a cell surface receptor to which ~~the~~ HIV binds;
  - (d) measuring the amount of the detectable signal produced by the second cell in order to determine the infectivity of the viral particles; and
  - (e) comparing the amount of signal measured in step (d) with the amount of signal produced in the absence of the antibody preparation, wherein a reduced amount of signal measured in the presence of the antibody preparation indicates that the patient has developed an antibody response to the viral envelope protein capable of blocking infection.
42. (Cancelled)
43. (Currently Amended) The method of Claim 38 ~~Claim 41~~ wherein said plurality of nucleic acids ~~the nucleic acid~~ of (i) ~~is integrated~~ are integrated into the genomes of the cells of the first sample of cells ~~the genome of the first cell~~.
44. (Currently Amended) The method of Claim 38 ~~Claim 41~~ wherein the viral vector of (ii) is integrated into the genomes of the cells of the first sample of cells ~~the genome of the first cell~~.

45. (Currently Amended) The method of Claim 38 ~~Claim 41~~ wherein said plurality of nucleic acids ~~the nucleic acid~~ of (i) and the viral vector of (ii) are integrated into the genomes of the cells of the first sample of cells ~~the genome of the first cell~~.
- 46.-52. (Canceled)
53. (Currently Amended) The method of Claim 41 wherein said plurality of nucleic acids ~~the nucleic acid~~ of (a)(i) ~~is integrated~~ are integrated into the genomes of the cells of the first sample of cells ~~the genome of the first cell~~.
54. (Previously Presented) The method of Claim 41 wherein the viral vector of (a)(ii) is integrated into the genomes of the cells of the first sample of cells ~~the genome of the first cell~~.
55. (Currently Amended) The method of Claim 41 wherein said plurality of nucleic acids ~~the nucleic acid~~ of (a)(i) and the viral vector of (a)(ii) are integrated into the genomes of the cells of the first sample of cells ~~the genome of the first cell~~.
56. (New) A method for detecting within a patient infected by an HIV population the development of an antibody response capable of blocking infection comprising:
- (a) contacting a plurality of viral particles ~~partiele~~ and an antibody preparation from the patient with a sample of cells ~~cell~~, said plurality of viral particles ~~partiele~~ comprising:
    - (i) ~~a nucleic acid encoding a~~ a plurality of viral envelope proteins from the HIV population infecting ~~viral envelope protein from the patient~~, and
    - (ii) a viral expression vector that lacks a nucleic acid encoding an envelope protein, and that comprises an indicator nucleic acid that produces a detectable signal upon introduction into a cell from the sample of cells, ~~wherein expression of the indicator nucleic acid is dependent upon expression of the nucleic acid encoding the viral envelope protein, and wherein the cell from the sample of cells~~ expresses a cell surface receptor to which HIV ~~the virus~~ binds;
  - (b) measuring the amount of the detectable signal produced by the sample of cells ~~cell~~; and
  - (c) comparing the amount of signal measured in step (b) with the amount of signal produced in the absence of the antibody preparation, wherein a reduced amount of signal measured in the presence of the antibody preparation

indicates that the patient has developed an antibody response to the viral envelope protein capable of blocking infection.

- 57. (Cancelled)
- 58. (New) The method of Claim 38, wherein the indicator gene is luciferase.
- 59. (New) The method of Claim 41, wherein the indicator gene is luciferase.
- 60. (New) The method of Claim 56, wherein the indicator gene is luciferase.